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GLOSSOP URBAN SANITARY AUTHORITY.

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# **SPECIAL REPORT**

OF THE

**MEDICAL OFFICER OF HEALTH**

**On an Outbreak of Scarlet Fever, 1906-1907.**

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**PREPARED BY ORDER OF THE LOCAL GOVERNMENT BOARD.**

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To the Mayor, Aldermen, and Councillors of the Borough of Glossop.  
GENTLEMEN,

A most disappointing thing it is for the Sanitarian, that when he has struggled for years to restrain Scarlet Fever, the result of his labours is that inflammable material is stored up in the form of susceptible children, or even grown-up people, which breaks out into a blaze when a light in the form of infection has been applied to it. Unfortunately, notwithstanding the efforts made throughout the country, Scarlet Fever has not been brought into the same category as Small Pox, which affects only a small minority of the people.

The efforts of the Sanitarian are not lost however, because if the invasion is delayed, some may have reached an age of insusceptibility, while others younger may have reached an age at which they are more able to bear up under the disease.

The infection of Scarlet Fever is a very strong and persistent infection, and with the to and fro movements of modern life, it is of course impossible entirely to prevent access of infection.

Undoubtedly the great agent for the spread of this disease, in despite of modern sanitary measures, is the presence of unrecognized cases. Such cases could not be entirely prevented except by house to house visitation, and even then they might escape.

As schools are the places where such cases are most liable to do mischief, and in which they might be most easily detected, regular inspection by a medical officer of schools would no doubt be of great use.

The schoolmasters, in this district at any rate, give loyal assistance to the Sanitary Authority, and thanks are due to them on that account; but anyone who knows the difficulty of detecting mild cases will understand that they cannot be expected to recognize every case. In this epidemic cases were discovered in various ways, by the sanitary officials, or otherwise, and of course, when discovered, measures for isolation were taken, but, unfortunately, not until after abundant opportunity for doing mischief.

Perhaps the only sanitary advantage of closing schools over exclusion of infected families is the avoidance so far of danger from unrecognized cases. It is noteworthy that these cases were found in the area from which the wave of epidemic spread, and that they were mostly found early in the epidemic, or before what we call the epidemic had begun.

The Borough of Glossop had a population last census of 21,526, and covers an area of 3,050 acres. It is situated on the northern boundary of Derbyshire, and is separated from the rest of Derbyshire by the Peak, and adjacent parts of the Pennine range. Its chief associations are with adjacent parts of Lancashire and Cheshire, and inter-communication of infection is most apt to take place with the towns and districts of those counties.

The people are for the most part employed in manufacture, and congregate in mills and workshops, where infection may be readily conveyed.

For purposes of comparison I present with this Report a table of the weekly incidence of Scarlet Fever during seven years, and have brought it down to Saturday, January 19th, 1907.

I propose to date the epidemic from November 3rd, 1906, when the weekly numbers rose permanently above five. To avoid confusion I shall deal with the period between November 3rd, 1906, and January 19th, 1907. It may be noted that about October is the time of greatest prevalence of Scarlet Fever in this country.

During the period stated above, you will see from the table that we had 109 cases notified. This number does not include one Diphtheritic case, which probably had Scarlet Fever as well.

During this period 63 cases were removed to the Hospital, there being 21 cases in the Hospital at the commencement of the period. The epidemic began in the Whitfield district, on the boundary line of All Saints' and St. James' Wards. It gradually extended through the Borough, Hadfield Ward being last affected, and the cases in that Ward being even now the least numerous.

As regards preventive measures in the case of individual houses, if we do our best at all times, we can do no better in times of epidemic. I think we have done our best with the means at our disposal. We have used boiling when possible, cleansing, and chemical disinfectants. The routine may be learned from our sheets of instruction for disinfection, which have been distributed to the infected houses. Of course they do not include the aerial disinfection by sulphur dioxide, which is done by the inspectors on the recovery or removal of cases. Of course by recovery I mean not only recovery from illness, but also from infectiousness.

With respect to individual houses the results have been good. Of 92 houses infected during the period mentioned, recurrence after the first notification has only taken place in eight. One of them was

probably a return case, as a patient had come out of the Hospital ten days before, and in two the patients were nursed in the houses at the time of recurrence.

In two of the remaining five houses in one case two, in the other three were notified within three days, showing that the infection had probably occurred before the removal of the first case or cases.

The houses are visited generally both by myself and one or both of the inspectors, and directions for disinfection are given, an estimate of the necessity for removal to the Hospital is formed, and advice given accordingly, and the milk supply and any other possible source of infection are inquired into.

Certificates are given by me for the schools, and intimation is given by the assistant inspector to the Library, the Laundries, and sometimes to the Pawnshops

The inspectors have worked very hard, and deserve all credit for having done so.

As to special measures for epidemic prevalence. On November 22nd, 1906, a letter, stating the most prominent symptoms of Scarlet Fever, and informing the citizens of their duty on observing such symptoms, appeared in the local papers. On December 10th, 1906, this letter was repeated. On January 9th, 1907, this letter, with additions suggested by the Mayor and the Town Clerk, had been printed, and was distributed throughout the town.

On November 26th, 1906, the school which was most involved was closed for a fortnight. It was well cleaned and disinfected with sulphur dioxide. At the close of the fortnight, as the fever had become more general, it seemed best to await the Christmas holidays, and exclude children from infected houses. As the Christmas holidays did not arrest the epidemic, it did not appear desirable to interfere any further with education.

Probably the Christmas holidays did more harm than good. A child can generally be prevented from going to school, but the same child may persuade its mother against her better judgment to allow it to go to an entertainment.

At present we are relying on rigid exclusion of children from infected homes.

As to removal to the Hospital, as I have stated above, 63 cases were removed to the Hospital during the period taken for discussion, and there were 21 inmates at the beginning of the period. These numbers, with a residence of from six to eight weeks in Hospital, were beyond the ordinary capacity of our Hospital. When cases occur in large families in small houses, or in places of business, the necessity for removal is very urgent.

The capacity of the Hospital was very much increased by employing buildings that we had not generally used for Scarlet Fever. but still the air space per patient is not what we could wish for.

Neighbouring districts have been approached with a view to the use of their Hospitals. We have not been successful in our own immediate neighbourhood, and there is an objection, and a very natural objection, on the part of parents to distant removal in this inclement weather.

It has been proposed to rapidly erect a temporary building, but apart from the impropriety of using such a structure for any other purpose after having been used for Scarlet Fever, I should have to be well satisfied as to the dryness and the warming of such a structure before I gave my support to such a scheme in the present state of the weather.

There is no doubt that if we are to have a Hospital to deal easily with epidemics, it must be much in excess of ordinary requirements. Whether it is justifiable to burden the rates with such provision is a question which I shall leave to others to solve.

At the Hospital we had very fair results under disadvantageous circumstances. The only death we had during the stated period was that of a woman, who was admitted in a very bad condition, and who was nursed in a small ward by herself.

I am sorry to say that at the date of finishing this report, January 26th, 1907, a delicate child, one year and ten months old, has been added to our mortality.

Then, as to return cases, I may explain that when due care is taken in discharge of patients to send them out at the right time, with uninfected clothes, infection conveyed on return is almost certainly due to their ears, noses, throats, &c., being infected from surrounding cases. Some think the liability to this is increased by their being kept too long in the Hospital.

I think we at Gamesley are exceptionally free from return cases, because the convalescents can play round the Hospital and in the adjoining wood, and have the cavities mentioned disinfected by fresh air.

During the last couple of months the severity of the weather has been such that the children have hardly been able to play outside at all, and the Hospital has been crowded, yet out of 32 houses to which patients were returned between October 28th, 1906, and January 12th, 1907, and 5, to which they were returned between January 12th, 1907, and January 19th, 1907, we can at this date, January 26th, 1907, only point to one house in which it is probable that infection was conveyed.

The matron and nurses have been very hard worked, but there is really no room for additional staff.

I am pleased to add that all at the Hospital have risen to the occasion in a very remarkable manner.

In conclusion, let us hope for a speedy arrest of the epidemic.

I am, Gentlemen, yours truly,

**DUNCAN J. MACKENZIE, M.D**

Loch Maree House, Glossop,  
*January 26th, 1907.*

# Weekly Notification of Scarlet Fever during Seven Years and Three Weeks.

| 1900.       |    |       | 1901.       |     |       | 1902.       |     |       | 1903.       |     |       |
|-------------|----|-------|-------------|-----|-------|-------------|-----|-------|-------------|-----|-------|
| Week ending |    | Cases | Week ending |     | Cases | Week ending |     | Cases | Week ending |     | Cases |
| Jan. 6      | .. | 0     | Jan. 5      | ..  | 2     | Jan. 4      | ..  | 1     | Jan. 3      | ..  | 6     |
| 13          | .. | 2     | 12          | ..  | 2     | 11          | ..  | 0     | 10          | ..  | 3     |
| 20          | .. | 2     | 19          | ..  | 0     | 18          | ..  | 0     | 17          | ... | 3     |
| 27          | .. | 1     | 26          | ..  | 3     | 25          | ..  | 1     | 24          | ..  | 6     |
| Feb. 3      | .. | 2     | Feb. 2      | ..  | 0     | Feb. 1      | ..  | 1     | 31          | ..  | 3     |
| 10          | .. | 2     | 9           | ..  | 3     | 8           | ..  | 0     | Feb. 7      | ..  | 3     |
| 17          | .. | 3     | 16          | ..  | 2     | 15          | ..  | 1     | 14          | ..  | 2     |
| 24          | .. | 1     | 23          | ..  | 3     | 22          | ..  | 1     | 21          | ..  | 0     |
| Mar. 3      | .. | 0     | Mar. 2      | ..  | 3     | Mar. 1      | ..  | 1     | 28          | ..  | 1     |
| 10          | .. | 3     | 9           | ..  | 1     | 8           | ..  | 1     | Mar. 7      | ..  | 0     |
| 17          | .. | 2     | 16          | ..  | 4     | 15          | ..  | 2     | 14          | ..  | 3     |
| 24          | .. | 1     | 23          | ..  | 5     | 22          | ..  | 2     | 21          | ..  | 2     |
| 31          | .. | 0     | 30          | ..  | 2     | 29          | ..  | 2     | 28          | ..  | 1     |
| Apr. 7      | .. | 0     | Apr. 6      | ..  | 3     | Apr. 5      | ..  | 2     | Apr. 4      | ..  | 2     |
| 14          | .. | 1     | 13          | ..  | 2     | 12          | ..  | 1     | 11          | ..  | 1     |
| 21          | .. | 1     | 20          | ..  | 3     | 19          | ..  | 1     | 18          | ..  | 0     |
| 28          | .. | 0     | 27          | ..  | 3     | 26          | ..  | 1     | 25          | ... | 0     |
| May 5       | .. | 3     | May 4       | ..  | 7     | May 3       | ..  | 0     | May 2       | ..  | 0     |
| 12          | .. | 1     | 11          | ..  | 9     | 10          | ..  | 0     | 9           | ..  | 0     |
| 19          | .. | 5     | 18          | ..  | 7     | 17          | ..  | 3     | 16          | ..  | 0     |
| 26          | .. | 1     | 25          | ..  | 9     | 24          | ..  | 0     | 23          | ..  | 3     |
| June 2      | .. | 1     | June 1      | ..  | 8     | 31          | ..  | 2     | 30          | ..  | 1     |
| 9           | .. | 1     | 8           | ..  | 6     | June 7      | ..  | 2     | June 6      | ..  | 0     |
| 16          | .. | 0     | 15          | ..  | 4     | 14          | ..  | 6     | 13          | ..  | 0     |
| 23          | .. | 1     | 22          | ..  | 2     | 21          | ..  | 6     | 20          | ..  | 0     |
| 30          | .. | 1     | 29          | ..  | 2     | 28          | ... | 4     | 27          | ..  | 0     |
| July 7      | .. | 0     | July 6      | ... | 5     | July 5      | ..  | 1     | July 4      | ..  | 0     |
| 14          | .. | 1     | 13          | ..  | 1     | 12          | ..  | 5     | 11          | ..  | 0     |
| 21          | .. | 0     | 20          | ... | 0     | 19          | ..  | 4     | 18          | ..  | 1     |
| 28          | .. | 1     | 27          | ..  | 4     | 26          | ... | 4     | 25          | ..  | 0     |
| Aug. 4      | .. | 3     | Aug. 3      | ..  | 3     | Aug. 2      | ..  | 2     | Aug. 1      | ..  | 0     |
| 11          | .. | 2     | 10          | ..  | 5     | 9           | ..  | 6     | 8           | ..  | 0     |
| 18          | .. | 1     | 17          | ..  | 0     | 16          | ..  | 0     | 15          | ..  | 0     |
| 25          | .. | 0     | 24          | ..  | 5     | 23          | ..  | 3     | 22          | ... | 1     |
| Sept. 1     | .. | 0     | 31          | ..  | 3     | 30          | ..  | 1     | 29          | ..  | 0     |
| 8           | .. | 2     | Sept. 7     | ..  | 2     | Sept. 6     | ..  | 0     | Sept. 5     | ..  | 0     |
| 15          | .. | 0     | 14          | ..  | 3     | 13          | ... | 6     | 12          | ..  | 0     |
| 22          | .. | 0     | 21          | ..  | 2     | 20          | ..  | 2     | 19          | ..  | 0     |
| 29          | .. | 0     | 28          | ..  | 3     | 27          | ... | 2     | 26          | ..  | 0     |
| Oct. 6      | .. | 3     | Oct. 5      | ..  | 3     | Oct. 4      | ..  | 5     | Oct. 3      | ..  | 0     |
| 13          | .. | 4     | 12          | ..  | 3     | 11          | ..  | 2     | 10          | ... | 0     |
| 20          | .. | 2     | 19          | ..  | 1     | 18          | ..  | 1     | 17          | ..  | 0     |
| 27          | .. | 6     | 26          | ..  | 3     | 25          | ..  | 2     | 24          | ..  | 0     |
| Nov. 3      | .. | 10    | Nov. 2      | ..  | 3     | Nov. 1      | ..  | 2     | 31          | ..  | 0     |
| 10          | .. | 1     | 9           | ..  | 0     | 8           | ..  | 1     | Nov. 7      | ... | 0     |
| 17          | .. | 6     | 16          | ..  | 1     | 15          | ... | 1     | 14          | ..  | 0     |
| 24          | .. | 4     | 23          | ..  | 3     | 22          | ... | 1     | 21          | ..  | 0     |
| Dec. 1      | .. | 2     | 30          | ..  | 0     | 29          | ..  | 4     | 28          | ..  | 0     |
| 8           | .. | 4     | Dec. 7      | ..  | 2     | Dec. 6      | ..  | 10    | Dec. 5      | ..  | 2     |
| 15          | .. | 1     | 14          | ..  | 4     | 13          | ..  | 2     | 12          | ..  | 1     |
| 22          | .. | 1     | 21          | ..  | 1     | 20          | ..  | 6     | 19          | ..  | 0     |
| 29          | .. | 2     | 28          | ..  | 1     | 27          | ..  | 3     | 26          | ..  | 0     |

## Weekly Notification of Scarlet Fever during Seven Years and Three Weeks.

| 1904.       |       |   | 1905.       |       |   | 1906.       |       |    | 1907.       |       |    |
|-------------|-------|---|-------------|-------|---|-------------|-------|----|-------------|-------|----|
| Week ending | Cases |   | Week ending | Cases |   | Week ending | Cases |    | Week ending | Cases |    |
| Jan. 2      | ..    | 1 | Jan. 7      | ..    | 7 | Jan. 6      | ..    | 3  | Jan. 5      | ..    | 14 |
| 9           | ..    | 0 | 14          | ..    | 1 | 13          | ..    | 4  | 12          | ..    | 6  |
| 16          | ..    | 0 | 21          | ..    | 1 | 20          | ..    | 9  | 19          | ..    | 11 |
| 23          | ...   | 0 | 28          | ..    | 5 | 27          | ..    | 3  |             |       |    |
| 30          | ..    | 0 | Feb. 4      | ..    | 4 | Feb. 3      | ..    | 8  |             |       |    |
| Feb. 6      | ..    | 0 | 11          | ..    | 4 | 10          | ..    | 3  |             |       |    |
| 13          | ..    | 0 | 18          | ..    | 2 | 17          | ..    | 0  |             |       |    |
| 20          | ..    | 0 | 25          | ..    | 4 | 24          | ..    | 3  |             |       |    |
| 27          | ..    | 0 | Mar. 4      | ..    | 1 | Mar. 3      | ..    | 3  |             |       |    |
| Mar. 5      | ..    | 3 | 11          | ..    | 1 | 10          | ..    | 2  |             |       |    |
| 12          | ..    | 1 | 18          | ..    | 0 | 17          | ..    | 2  |             |       |    |
| 19          | ..    | 0 | 25          | ..    | 1 | 24          | ..    | 6  |             |       |    |
| 26          | ..    | 1 | Apr. 1      | ..    | 0 | 31          | ..    | 12 |             |       |    |
| Apr. 2      | ..    | 0 | 8           | ..    | 5 | Apr. 7      | ..    | 4  |             |       |    |
| 9           | ..    | 0 | 15          | ..    | 5 | 14          | ..    | 5  |             |       |    |
| 16          | ..    | 0 | 22          | ...   | 0 | 21          | ..    | 4  |             |       |    |
| 23          | ...   | 0 | 29          | ..    | 1 | 28          | ..    | 2  |             |       |    |
| 30          | ..    | 0 | May 6       | ..    | 0 | May 5       | ..    | 3  |             |       |    |
| May 7       | ..    | 1 | 13          | ..    | 8 | 12          | ..    | 1  |             |       |    |
| 14          | ..    | 0 | 20          | ..    | 4 | 19          | ..    | 2  |             |       |    |
| 21          | ..    | 1 | 27          | ..    | 1 | 26          | ..    | 1  |             |       |    |
| 28          | ..    | 0 | June 3      | ..    | 0 | June 2      | ..    | 0  |             |       |    |
| June 4      | ..    | 2 | 10          | ..    | 1 | 9           | ..    | 0  |             |       |    |
| 11          | ..    | 1 | 17          | ..    | 0 | 16          | ..    | 2  |             |       |    |
| 18          | ..    | 0 | 24          | ..    | 1 | 23          | ..    | 1  |             |       |    |
| 25          | ..    | 0 | July 1      | ..    | 1 | 30          | ..    | 0  |             |       |    |
| July 2      | ..    | 0 | 8           | ..    | 0 | July 7      | ..    | 2  |             |       |    |
| 9           | ..    | 0 | 15          | ..    | 2 | 14          | ..    | 3  |             |       |    |
| 16          | ..    | 0 | 22          | ..    | 0 | 21          | ..    | 2  |             |       |    |
| 23          | ..    | 1 | 29          | ...   | 1 | 28          | ..    | 1  |             |       |    |
| 30          | ..    | 0 | Aug. 5      | ...   | 1 | Aug. 4      | ..    | 3  |             |       |    |
| Aug. 6      | ..    | 0 | 12          | ..    | 3 | 11          | ..    | 0  |             |       |    |
| 13          | ..    | 0 | 19          | ..    | 0 | 18          | ..    | 2  |             |       |    |
| 20          | ..    | 1 | 26          | ..    | 4 | 25          | ..    | 0  |             |       |    |
| 27          | ...   | 0 | Sept. 2     | ..    | 2 | Sept. 1     | ..    | 1  |             |       |    |
| Sept. 3     | ..    | 0 | 9           | ..    | 0 | 8           | ..    | 0  |             |       |    |
| 10          | ..    | 0 | 16          | ..    | 0 | 15          | ..    | 4  |             |       |    |
| 17          | ..    | 0 | 23          | ..    | 0 | 22          | ..    | 3  |             |       |    |
| 24          | ...   | 0 | 30          | ..    | 4 | 29          | ..    | 2  |             |       |    |
| Oct. 1      | ..    | 6 | Oct. 7      | ..    | 0 | Oct. 6      | ..    | 8  |             |       |    |
| 8           | ..    | 3 | 14          | ..    | 3 | 13          | ..    | 4  |             |       |    |
| 15          | ..    | 4 | 21          | ..    | 1 | 20          | ..    | 3  |             |       |    |
| 22          | ..    | 4 | 28          | ..    | 2 | 27          | ...   | 4  |             |       |    |
| 29          | ..    | 2 | Nov. 4      | ..    | 0 | Nov. 3      | ..    | 1  |             |       |    |